QNAP Innovative Network Video Recorder

NVR (Network Video Recorder) provides complete network video recording functions to enable users to manage network cameras collectively via the operation interface, and capture the video data of network camera (IP camera) actively and save it to the hard disks of NVR. NVR also supports synchronized recording, monitoring and playback by remote login to enhance the efficiency and convenience of network cameras.
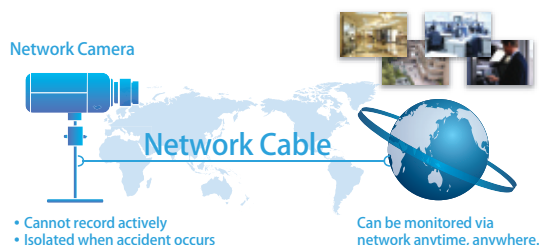
The advantages of NVR system

What are the advantages and disadvantages of network camera?

Advantage:
User can connect to the network camera to view the monitoring screen via IE browser directly.

Disadvantage:
Without complete recording and playback solutions

Network Camera

Network Cable

• Cannot record actively
• Isolated when accident occurs

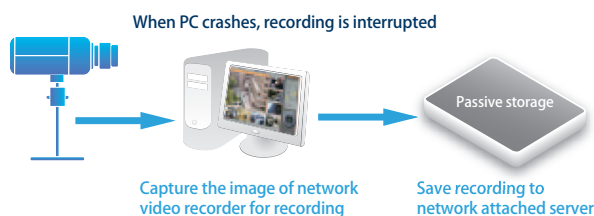Can be monitored via network anytime, anywhere.

The drawbacks of traditional solution
Traditionally, users need to install professional PC-based storage software into the computer and save the recorded video files from network cameras to PC or network storage device.

The disadvantages of installing PC-based storage software:
• Need to setup PC environment firstly and extra time is needed to install the software. There may be many technical issues happen such as software compatibility problems.

• There are so many things that PC OS need to take care of except recording video from network camera, so the unsteady PC performance may affect recording quality.

• When PC or the peripheral network devices encounter errors, recording process will be terminated. There are still risks from the Internet, such as virus attack and hacking which may cause the system unstable.

• The users have to possess professional network knowledge and skills to complete the complicated of the installation process.

• It is hard to identify the source of the problem by scanning and checking PC components and its peripherals when recording error occurs.

⬇ IP Camera + PC-based solution

When PC crashes, recording is interrupted

Passive storage

Capture the image of network video recorder for recording

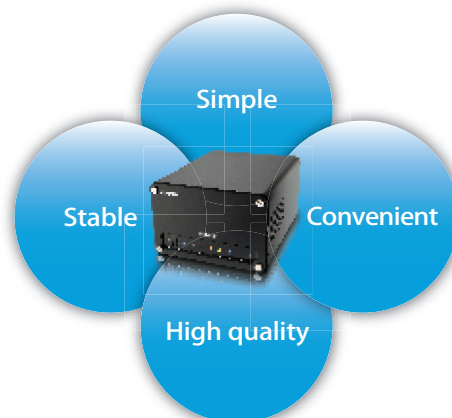Save recording to network attached server

QNAP VioStor-201 offers simpler, more convenient and stable system with high quality video storage

QNAP VioStor NVR high-performance, embedded solution differs from complex and error-prone traditional PC-based structure, provides reliable RAID subsystem that stores high quality videos from our selected compatible IP cameras and makes simple surveillance environment feasible for home, SOHO and SMB users now.

You can set up your NVR in only 6 steps followed by smart instructions of QNAP Quick Setup wizard and simply make it work. QNAP VioStor-201 adopts the most innovative technology for recording real-time video data from network cameras. It also integrates many advanced recording functions, such as PTZ models of famous network camera. With user-friendly web UI, you can monitor at most 8 IP cameras simultaneously in one page regardless of the separated locations.

VioStor-201 actively records video from IP cameras located in LAN or remote sites through the Internet into a two-bay, hot-swappable RAID storage. It allows advanced user management to restrict right person to access the right network camera.

⬇ Innovative active storage technology

Internet   Internet

Network Camera

QNAP VioStor-201:
Embedded recording
software

Monitoring:
No recording software
is needed!

Simple

Stable   **Convenient**

High quality

▶ VioStor-201 Network Video Recorder

Hottest New Product!

QNAP VioStor-201 is a dedicated active storage device equipped with innovative technology for storing the recordings of network cameras actively. It integrates the advanced recording functions of popular network cameras into a user-friendly web UI.

VioStor-201 can record video actively from various IP cameras located in local or remote sites into a dedicated storage device instead of personal computer. It also supports real-time monitoring everywhere via the web.

Secure Your Life,
Secure Your Property.

MegaPixel **GigaLan** **RAID1/0** **Hot-Swap** **MJPEG/MPEG4**

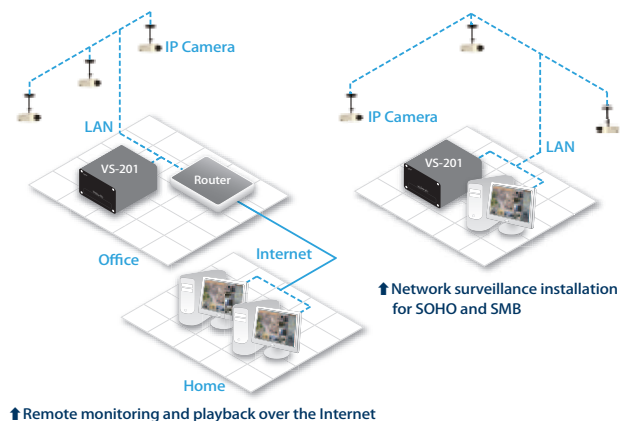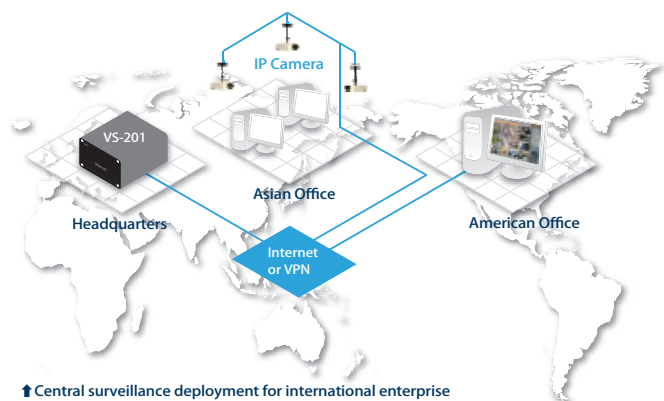## ▶ Outstanding Product features

Best Hardware Design

· Embedded system with lowest power consumption
Linux embedded system is secure, stable and power-saving. It is less liable to PC crash and virus attack. Also, there is no need to install extra software or perimeter devices as PC does. This enhances the stability and convenience of monitoring and recording. (VioStor-201 is only 25.2W !! PC-based is around 250~300W)

· Support 2 high-speed SATA hard drives
SATA hard drives are faster than IDE hard drives, which enhance recording and playback performance.

· Storage capacity up to 2TB for long time recording
VioStor is the best choice for long-time recording and saving large amount of recording data.

· Small-sized, easy to deploy
VioStor occupies small space. It is easy to install and maintain.

Powerful Surveillance Features

· High quality recordings in Motion-JPEG and MPEG-4 (depend on camera)
VioStor supports high quality monitoring, recording and playback.

· All-in-one recording functions:
• Continuous /Manual /Schedule recording
• Alarm recording (by motion detected or sensor triggered)

The all-in-one recording functions of VioStor includes continuous and manual recording. By manual recording, users can enable recording in emergent condition. Moreover, VioStor provides scheduled recording that users can set different recording schedules for different cameras. 15 schedules are supported for

· VioStor Network Architecture

IP Camera

VS-201

Asian Office

Headquarters

American Office

Internet or VPN

⬆ Central surveillance deployment for international enterprise

IP Camera

LAN

VS-201 Router

IP Camera

LAN

VS-201

Office Internet

⬆ Network surveillance installation for SOHO and SMB

Home

⬆ Remote monitoring and playback over the Internet

Stable • Reliable • High Performance

each camera at maximum. VioStor also provides alarm recording that recording will start automatically when motion detection or camera sensor is triggered. No important events will be missed under the secure monitoring of VioStor!

· **Variety live video monitoring:**
  · Single/Quad/Octave/Sequential mode
  · Exclusive Picture-in-Picture mode

VioStor is the world's only system that supports picture-in-picture mode. Variety monitoring combinations are also provided. Users can adjust the monitoring modes according to their own demand.

· **Real-time monitoring everywhere**
By web-based monitoring and management interface, you can manage recording, live monitoring and playback video anytime, anywhere.

· **Smart control of PTZ (Pan, Tilt, Zoom) & speed dome camera by direct clicking on video screen**
If the network camera supports PTZ camera, VioStor enables users to click on the PTZ control on the web interface directly to adjust the direction and zooming angle of the camera.

· **E-map function for easy preview of the camera location**
VioStor is the world's only NVR that provides exclusive E-map function. Users can upload the pictures of the location that the cameras are installed. In case of emergency, they can refer to the E-map to indicate the location and adjust the monitoring direction.

· **Support video snapshot**
VioStor provides real-time monitoring as well as real-time snapshot. Users can take a snapshot of the monitoring screen anytime.

· **Real-time e-mail notification to user upon alert events**
VioStor supports e-mail alert feature that warning e-mails will be sent to administrator immediately in case of system error or emergent events.

· **Powerful pre-alarm and post-alarm recording**
VioStor supports pre-alarm and post-alarm recording, which is used to record additional detail before and after the event occurs.

· **Easy playback searching by date & time and alarm event**
VioStor enables searching recording data by date and time, and also by alert events. This reduces the time and enhances the efficiency of searching recording.

· **Recordings can be easily downloaded to remote computer for playback**
VioStor adopts complete network-based management interface that users can download recording data via the web and play the files from remote computer. This largely increases the convenience of accessing recording data.

· **Recordings can be played by Windows Media Player**
The file format of VioStor recording data is avi. Users can play the files by the popular video playing program. There is no need to install unique program or convert the files to other formats to view the video.

· **Flexible adjustment of the length of recording files**
VioStor enables users to adjust the length of the recording files, which is more flexible than general NVR that recording length is fixed.

· **Support monitoring preset position control**
You can view different preset positions of the camera by clicking the number buttons on monitoring page.

➡ E-map preview

· **(Option)support Audio recording function**
VioStor supports powerful audio recording. When record, monitor or play back video, audio function can be enabled for complete surveillance.

⬇ Octave live video monitoring ⬇ Picture-in-Picture mode live video monitoring

Easy to Use

· **Easy setup in only 6 steps, the system is ready to use!**
VioStor provides quick setup for users to complete installation in 6 simple steps. Even novice can finish the installation easily.

· **Intuitive user interface and simple GUI.**
The intuitive and user-friendly administration interface is highly suitable for home, SOHO and SMB users to install and manage the system quickly and conveniently.
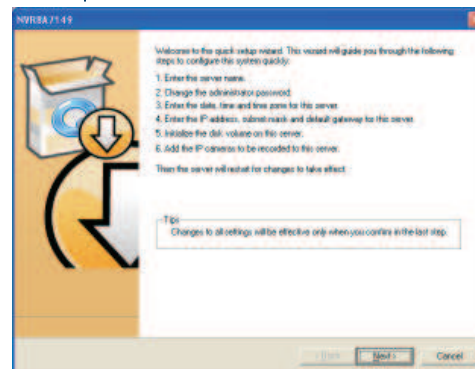
· **All functions can be managed anytime, anywhere via web interface**
The web-based administration interface enables users to access VioStor anytime via the network.

· **Convenient quick link buttons of network camera**
Besides configuring the network cameras by the administration interface of VioStor, users can also make use of the quick link buttons to access the management interface of the network cameras to configure the cameras.

⬇ 6 Steps to install VioStor

High Performance

· **Video recording frame rate*:**
  · Up to 240 frames at QVGA (320x240) or CIF (352x240 in NTSC, 352x288 in PAL)
  · Up to 80 frames at VGA (640x480)
  * Real performance may varies in different environment

VioStor provides outstanding recording quality. In purely independent network environment, QVGA or CIF can reach 240 frames/sec.

· **High-speed Gigabit LAN interface**
VioStor is equipped with Gigabit LAN port to largely enhance the network access performance.

High Reliability and Smart Features

- **Support extra secure data protection by RAID 1 Mirroring**
  To enhance data security and protection, VioStor provides RAID 1 (mirroring) configuration. Recording data is highly secured and the reading rate is also increased. VioStor also provides hot swap function. When a hard disk fails, the failed disk can be replaced by a new one immediately without shutting down the system, and the recording data can be reserved.

- **Support RAID 0, JBOD (Just a Bunch of Disks/ Linear)**
  In addition to RAID 1 (mirroring) function, VioStor supports RAID 0 and JBOD configurations for larger storage capacity and higher reading and writing performance.

- **Intelligent automatic system startup when power resumes after power outage**
  VioStor supports intelligent power-on support. When enabled, the system can turn on automatically when power resumes after power outage.

- **Support UPS (Uninterruptible Power Supply) system for 24x7 service**
  VioStor supports UPS to enable stable and continuous recording 24x7. With UPS, the system can function normally in case of power outage or unstable power supply.

- **Convenient video backup to external USB storage by One Touch auto video backup button**
  VioStor supports exclusive USB auto video backup button. By pressing the button once, all recording data on VioStor will start to be copied to external USB storage device immediately.

- **Detailed record of all events**
  VioStor provides detailed event logs covering system warning, hard disk error, network disconnection and UPS status etc. for users to maintain and manage VioStor. The logs can be classified to all events, warning & errors, and errors for quick searching.

⬇ VS-201 RAID setup page

Powerful Network Services

- **Powerful authority management. The right to monitor and playback each camera can be separately defined for each individual user**
  VioStor enables administrator to configure monitoring and playback authority of specified cameras for different users. The authority can be set for up to 32 users. Different monitoring and playback rights can be assigned for individual user.

- **Provide On-line User list**
  You can view the record of users currently logged on and previously logged on to the NVR.

- **Powerful host access control**
  Specify the connections to be allowed and denied to access NVR.

- **Built-in NTP server. Date and time of the network cameras are synchronized with this NVR**
  VioStor has built-in NTP server feature. All the network cameras connected to the VioStor can synchronize the time settings with VioStor. Users do not need to establish another NTP server or adjust the time of the cameras one by one.

- **The world's only NVR with NAS feature embedded**
  - Network Neighborhood (SMB/CIFS)
  - FTP server
  - Web File Management (HTTP)

VioStor is built-in with powerful NAS (Network attached storage) function. Users can access the data on the server via SMB/CIFS, Web File Manager and FTP. Multiple network resource sharing mechanisms are provided for users to access and play the recording files.

Software specification

Video	
Display Mode	1, 4, 8, Picture in Picture ,Sequential mode
Recording Cameras Number	Up to 8
Network Camera Support	Panasonic BB and BL Series PTZ camera/ Canon VB-series/ Axis IP camera & video server / Vivotek IP camera & video server More brands and series will be supported in the future * For the information of supported camera models, please visit QNAP website, www.qnap.com
Compression Format	Motion JPEG MPEG 4 (depend on IP Camera)
Video Setting	Resolution, Quality, Frame Rate
E-map	Upload E-map
Recording	
Recording Mode	Continuous , Manual, Schedule , Alarm , Motion, Snapshot
Buffer Storage for Alarm Images (before and post events)	Pre-recording :300 Seconds / Post –recording :300 Seconds (Total 600 Seconds/ 10 Minutes)
Recording Performance	Up to 240 frames at QVGA (320x240) or CIF (352x240 in NTSC, 352x 288 in PAL)/Up to 80 frames at VGA (640x480) * Real performance may varies in different environment
File format	AVI (Recordings can be played by Windows Media Player)
Playback	
Playback Mode	Play , Pause , Stop , Fast forwards , Full screen display
Video Search	Search by Date , Time
Video Player	Immediately playback by default video player
Download	Click to download recorded files from Web-Page
Storage	
Disk Mode	Single , Raid 0 , Raid 1 , JBOD/ Linear
Capacity	Support 2 x 3.5" SATA I/II HDD, Up to 2TB
Services	Web File Manager , FTP , SMB/CIFS
Network	
Support	HTTP , TCP/IP , SMTP, DHCP, Static IP, DNS, DDNS, FTP, NTP, UPnP
Camera IP address & Port	Allow setting LAN/WAN IP address of each camera
Utility Software	
QNAP Finder	Discovery and quick setup
Security	
Operation system	Linux embedded, free from PC crash and virus attack
User Management	The right to monitor and playback each camera can be separately defined for each individual user (up to 32 users)
On-line Users List	Record of users currently logged on and previously logged on to the NVR
Host Access Control	Specify the connections to be allowed and denied to access NVR.
Alert Notification	E-mail , Buzzer, Event log
UPS	Support APC (USB type of UPS)
Event Log	Detailed record of all events
Client PC Requirement (Suggested system requirement for better video performance)	
CPU	Pentium 4 CPU 2 GHz or higher
Memory	512 MB or above
Operation system	Windows XP or later
Browser	Internet Explorer 6.0 or later
Network interface	10/100 Mbps or above
View Resolution	Suggest 1024 X 768 pixel or above
Language Support	
English / Japanese/ French / Italian / German /Spanish/ Simplified Chinese / Traditional Chinese	
Certification	
CE , FCC , VCCI ,BSMI	

Hardware specification

HDD	2 x 3.5" SATA I/II HDD, up to 2TB. (the standard system is shipping without HDD)
LAN Ports	1 x Gigabit RJ-45 Ethernet port
LED Indicator	Power, USB, status, LAN, hard disk
USB	3 x USB ; For USB storage device for One Touch Auto-Video Backup and UPS device
Button	USB Auto-Video Backup Button , Power Button , Reset Button
Form Factor	Desktop
Dimensions	214(D) x 175(W) x 115 (H) mm
Color Box Shipping Weight	3.5 Kg (Without HDD)
Operation Enviroment	Temperature: 0~40℃ Humidity: 0%~90% R.H
Power Supply	External power adapter, 60W, 100~240V
Energy saving Design	HDD Sleep mode Low power consumption & low noise
Thermal solution	Noiseless Fan Case
Secure Design	K-Lock Security Slot for Theft Prevention

* Designs and specifications are subject to change without notice.

VioStor-101

Hottest New Product!

VioStor-101 is the world's most affordable and reliable remote monitoring and recording NVR (Network Video Recorder) for Panasonic, Axis, Canon, Vivotek IP cameras under Linux, RISC CPU, and embedded architecture. With this architecture, VioStor-101 is high performance, embedded solution differs from all the complex and error–prone traditional PC-based recording solutions, VioStor-101 supports 4-channel M-JPEG or MPEG4 recording and 1 high-speed SATA hard disk up to 1 TB for Long-time recording!

**Secure Your Life,
Secure Your Property.**

`MegaPixel`   `GigaLan`   `MJPEG/MPEG4`

Key Benefits of VioStor-101

- Exclusive Linux + RISC CPU + Embedded System, Ultra-stable and Reliable Recording Solution (PC-less recording)

- Real-time Monitoring/ Recording of Video and Audio from Versatile Network Cameras.

- Best Centralized Multi-channel Monitoring with "Click-to-Go" PTZ Control and Selective Display Mode.

- Most Complete Recording Features: Schedule Recording, Alarm Recording, Alarm Recording Schedule, Motion-detection-triggered Recording, Pre-alarm and Post-alarm Recordings, etc.

- Ultra High-volume Support up to 1TB for Long-time recording
- Powerful Remote Management: Access and Playback Your Recordings through Web browser, FTP, and Network Neighborhood Anytime, Anywhere under the Most Secure Authority Control.

- Unique Online User List Function and Host Access Authority control.

- Effort-free Maintenance: Ultra-stable, Continuous Recording with the Most Intelligent Recording Policy.

- VioStor's Setup Procedure Can be Completed in Just 6 Steps!!!

- One-Touch Video Backup Button Provides an Extremely Easy Way to Retrieve Recordings of Definable Period.

- Easy-to-Deploy, Small Footprint, and Extra Power-saving at only 14.4W!!! (PC-based is around 250W~300 W!)

- Support UPS (Uninterruptible Power Supply) system for 24×7 service.

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Display Mode	1, 4, Picture in Picture ,Sequential mode
Recording Cameras Number	Up to 4
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Playback Mode	Play , Pause , Stop , Fast forwards , Full screen display
Video Search	Search by Date , Time
Video Player	Immediately playback by default video player
Download	Click to download recorded files from Web-Page
Storage	
Disk Mode	Single , Raid 0 , Raid 1 , JBOD/ Linear (RAID is enabled via Qback-35 box with preference hard disk)
Capacity	Support 1 x 3.5" SATA I/II HDD, up to 1 TB or above, expandable to 2 TB through QBack-35 with preference hard disk
Services	Web File Manager , FTP , SMB/CIFS
Network	
Support	HTTP , TCP/IP , SMTP, DHCP, Static IP, DNS, DDNS, FTP, NTP, UPnP
Camera IP address & Port	Allow setting LAN/WAN IP address of each camera
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Form Factor	Portable desktop
Dimensions	210(D) x 60(W) x 182 (H) mm
Color Box Shipping Weight	2.5Kg (Without HDD)
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Power Supply	External power adapter, 36W, 100~240V
Energy saving Design	Low power consumption(only 14.4W) & low noise
Thermal solution	Heat dissipation by aluminum case
Secure Design	K-Lock Security Slot for Theft Prevention Power cord hook for kicking-off prevention

Innovate Your Business